

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A first node comprising:

~~a processor~~ one or more processors; and

[[a]] memory;

~~wherein the processor is operable to execute program instructions stored in the memory stores program instructions executable by the one or more processors to implement:~~

receiving a request from a client application, wherein the request requires a transaction;

in response to the request, sending a first message to a plurality of participant nodes participating in the transaction;

in response to receiving a reply to the first message from at least a quorum of the participant nodes, sending a second message to the plurality of participant nodes;

in response to receiving a reply to the second message from at least a quorum of the participant nodes:

returning an indication success to the client application that the request was successfully processed; and

sending a third message to the plurality of participant nodes, wherein the third message instructs the participant nodes to commit the transaction.

2. (Currently Amended) The first node of claim 1,

wherein said sending the third message to the plurality of participant nodes comprises sending the third message after said returning the indication success to the client application.

3. (Currently Amended) The first node of claim 1,

wherein the first message comprises a message requesting each of the participant nodes to reply by indicating whether they can commit the transaction;

wherein said receiving the reply to the first message from at least a quorum of the participant nodes comprises receiving a reply indicating an ability to commit the transaction from at least a quorum of the participant nodes.

4. (Currently Amended) The first node of claim 1,

wherein the second message comprises a message requesting each of the participant nodes to enter a state indicating that the transaction is to be committed;

wherein said receiving the reply to the second message from at least a quorum of the participant nodes comprises receiving a reply indicating movement to entrance into the state indicating that the transaction is to be committed from at least a quorum of the participant nodes.

5. (Currently Amended) The first node of claim 1,

wherein the first message corresponds to a message for a first phase of a three-phase commit protocol.

6. (Currently Amended) The first node of claim 1,

wherein the second message corresponds to a message for a second phase of a three-phase commit protocol.

7. (Currently Amended) The first node of claim 1,

wherein sending the third message to the plurality of participant nodes completes the first node's involvement in the transaction.

wherein the processor is operable to execute program instructions stored in the memory to further implement:

forgetting about the transaction after said sending the third message.

8. (Currently Amended) The first node of claim 1,

wherein the node completion of the transaction does not expect require a reply to the third message from any of the participant nodes.

9. (Currently Amended) The first node of claim 1,
wherein each participant node commits the transaction in response to receiving the third message but does not return a reply to the third message.

10. (Currently Amended) The first node of claim 1,
wherein the request comprises a request to update a file;
wherein the request requires a transaction comprises a transaction to coordinate updates to update multiple replicas of the file, wherein each respective replica is located on a respective one of the plurality of participant node nodes.

11. (Currently Amended) The first node of claim 1,
wherein the first node is a node in a peer-to-peer network;
wherein the peer-to-peer network implements a distributed file sharing system.

12. (Currently Amended) A first node comprising:
a processor one or more processors;
[[a]] memory;
wherein the processor is operable to execute program instructions stored in the memory stores program instructions executable by the one or more processors to implement:

receiving a request from a client application, wherein the request requires a transaction;

in response to the request, sending a first message to a plurality of participant nodes participating in the transaction;

in response to receiving a reply to the first message from at least a quorum of the participant nodes, sending a second message to the plurality of participant nodes;

in response to receiving a reply to the second message from at least a quorum of the participant nodes, sending a third message to the plurality of participant nodes, wherein the third message instructs the participant nodes to commit the transaction;

wherein the node completion of the transaction does not expect require a reply to the third message from any of the participating node nodes.

13. (Currently Amended) The first node of claim 12,
wherein sending the third message to the plurality of participant nodes completes
the first node's involvement in the transaction.
wherein the node forgets about the transaction after said sending the third message.

14. (Currently Amended) A carrier computer-readable memory medium comprising storing program instructions executable to implement:

receiving a request from a client application, wherein the request requires a transaction;

in response to the request, sending a first message to a plurality of participant nodes participating in the transaction;

in response to receiving a reply to the first message from at least a quorum of the participant nodes, sending a second message to the plurality of participant nodes;

in response to receiving a reply to the second message from at least a quorum of the participant nodes:

returning an indication success to the client application that the request was successfully processed; and

sending a third message to the plurality of participant nodes, wherein the third message instructs the participant nodes to commit the transaction.

15. (Currently Amended) The carrier computer-readable memory medium of claim 14,

wherein said sending the third message to the plurality of participant nodes comprises sending the third message after said returning the indication success to the client application.

16. (Currently Amended) The earlier computer-readable memory medium of claim 14, wherein the program instructions are further executable to implement:
forgetting about the transaction after said sending the third message;
wherein completion of the transaction does not require a reply to the third message from any of the participant nodes.

17. (Currently Amended) The [[node]] computer-readable memory medium of claim [[1]] 14,
wherein the request comprises a request to update a file;
wherein the request requires a transaction comprises a transaction to coordinate updates to update multiple replicas of the file, wherein each respective replica is located on a respective one of the plurality of participant node nodes.

18. (Currently Amended) A earlier computer-readable memory medium comprising storing program instructions executable to implement [[the]] a method [[of]] comprising:

a first node receiving a request from a client application, wherein the request requires a transaction;

in response to the request, the first node sending a first message to a plurality of participant nodes participating in the transaction;

each of the plurality of participating nodes replying to the first message by indicating an ability to commit the transaction;

the first node sending a second message to the plurality of participant nodes;

each of the plurality of participating nodes replying to the second message by indicating entrance to a state indicating that the transaction is to be committed;

in response to receiving replies to the second message from at least a quorum of the participant nodes, the first node returning an indication success to the client application that the request was successfully processed; and

the first node sending a third message to the plurality of participant nodes, wherein the third message instructs the participant nodes to commit the transaction.

19. (Currently Amended) The carrier computer-readable memory medium of claim 18,

wherein said sending the third message to the plurality of participant nodes comprises sending the third message after said returning the indication success to the client application.

20. (Currently Amended) The carrier computer-readable memory medium of claim 18, wherein the method implemented by the program instructions further comprising program instructions to implement comprises:

each participant node committing the transaction in response to receiving the third message;

wherein the participant nodes do not send a reply to the third message to the first node.

21-22. (Canceled)